

REMARKS

Prior to entry of this amendment, claims 1-11 are pending in the present application. Claim 6 has been amended to more clearly recite the present invention, and claims 5, 9 and 11 have been broadened. Claims 12-20 have been added. Claims 1 and 6 are independent.

Applicants appreciate the Examiner's acknowledgement of applicants' claim for foreign priority and receipt of a certified copy of the priority document.

Applicants respectfully request that, in connection with the next Office action, the Examiner indicate the acceptability of the drawings filed on January 13, 2004.

Applicants respectfully request that, in connection with the next Office action, the Examiner consider the Information Disclosure Statement filed on January 13, 2004.

Claims 1-20 are presented to the Examiner for further or initial consideration on the merits.

A. Introduction

In the Office action dated April 19, 2005, the Examiner objected to the title, rejected claims 1-3 and 5 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,172,321 to Yoshioka et al. ("the Yoshioka et al. reference"), and rejected claims 4 and 6-11 under 35 U.S.C. §103(a) as being unpatentable over the Yoshioka et al. reference, in view of U.S. Patent No. 5,302,803 to Stevens et al. ("the Stevens et al. reference").

B. Objection to the Title

In the outstanding Office action, the Examiner objected to the title as not being descriptive. The title has been amended to be more descriptive. Therefore, it is respectfully requested that this objection be withdrawn.

C. Asserted Anticipation Rejection

In the outstanding Office action, the Examiner rejected claims 1-3 and 5 under 35 U.S.C. §102(b) as being anticipated the Yoshioka et al. reference. This rejection is respectfully traversed for at least the reasons set forth below.

The Examiner characterizes element 20 in FIG. 12 of the Yoshioka et al. reference as comprising “an alumina refractive element as claimed, which acts to change the propagation direction of the microwave.” *Office action dated April 19, 2005, p. 2.* It is respectfully submitted that while element 20 may be made of alumina, as recited in dependent claim 3, it does not therefore inherently serve as a refractor altering the propagation direction. Specifically, since the element 20 is disclosed in the Yoshioka et al. reference merely as an insulating spacer, and is flat, there is no teaching or suggestion in the Yoshioka et al. reference that element 20 refracts, i.e., deflects, the microwaves from their path, as recited in claim 1.

Therefore, it is respectfully submitted that the Yoshioka et al. reference fails to disclose or suggest the present invention as recited in claim 1. The remaining rejected claims depend, either directly or indirectly, from claim 1, and are believed to be allowable for at least the reasons set forth above. Therefore, it is respectfully requested that this rejection be withdrawn.

D. Asserted Obviousness Rejection

In the outstanding Office action, the Examiner rejected claims 4 and 6-11 under 35 U.S.C. §103(a) as being unpatentable over the Yoshioka et al. reference in view the Stevens et al. reference. This rejection is respectfully traversed for at least the reasons set forth below.

Regarding claim 4, which depends from claim 1, it is noted that the Stevens et al. reference fails to disclose or suggest a refractor, noted above as missing from the Yoshioka et al. reference. Therefore, it is respectfully submitted that claim 4 is allowable for at least the reasons claim 1 is allowable.

Regarding independent claim 6, claim 6 recites a refractor for refracting the microwaves. Claim 6 further recites that the refractor transmits the microwaves as plane waves. Claim 6 has been amended to clarify that the microwaves received by the refractor are not planar, as shown, for example, in FIG. 2 of the original specification, in which the microwaves are diverging when they are incident on the refractor 51.

Again, while element 20 of the Yoshioka et al. reference may be made of alumina, as recited in dependent claim 8, it does not therefore inherently serve as a refractor changing a non-planar wavefront into a planar wavefront. Specifically, since the element 20 is disclosed in the Yoshioka et al. reference merely as an insulating spacer, and is flat, there is no teaching or suggestion in the Yoshioka et al. reference that element 20 refracts, i.e., deflects, the microwaves from their path, as recited in claim 6.

The Stevens et al. reference fails to provide this missing teaching. Therefore, it is respectfully submitted that neither the Yoshioka et al. reference nor the Stevens et al. reference, either alone or in combination, suggest, much less disclose, the present invention as set forth in claim 6. Rejected claims 7-11 depend, either directly or indirectly, from claim 6 and are believed to be allowable for at least the reasons set forth above.

Therefore, it is respectfully requested that this rejection be withdrawn.

E. New Claims 12-20

Claims 12-15, depending from claim 1, and claims 16-19, depending from claim 2, recite further details of the refractor shown in FIG. 2 of the original specification. Claim 20 depends from claim 9, and recites limitations canceled from claim 9. Therefore, no new matter has been added.

F. Conclusion

Since the cited prior art references neither anticipate nor render obvious the subject invention as presently claimed, applicants respectfully submit that claims 1-20 are now in condition for allowance, and a notice to that effect is respectfully requested.

The remaining documents cited by the Examiner were not relied on to reject the claims. Therefore, no comments concerning these documents are considered necessary at this time.

If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.



Respectfully submitted,

Date: July 19, 2005

A handwritten signature in black ink, appearing to read "Eugene M. Lee".
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This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.